

## ABSTRACT

1       An IV line temperature controlled warming device includes a housing and a fluid cassette  
2 or cartridge that receives fluid from an IV line and includes intravenous line tubing arranged in  
3 a preformed configuration. The configuration includes tubing sections arranged in generally  
4 circular and concentric portions and a central serpentine tubing section that basically reverses  
5 fluid flow and facilitates flow in opposing directions within adjacent tubing sections. The fluid  
6 cassette is retained within the device on a base plate partially disposed within a device housing  
7 interior, while a housing cover is selectively opened and closed to permit access to the base plate.  
8 The base plate includes a heater plate disposed thereon, while the cover and heater plate each  
9 include heating elements to apply heat to opposing surfaces of the tubing cassette. The heating  
10 elements are controlled by a controller in response to measured temperatures of the heater plate  
11 and fluid.